

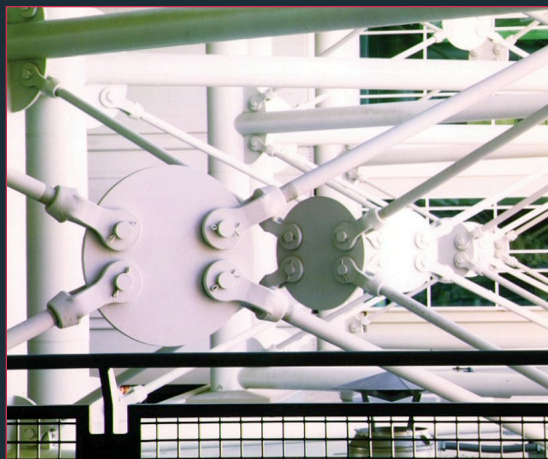


Forged Steel Structural Hardware

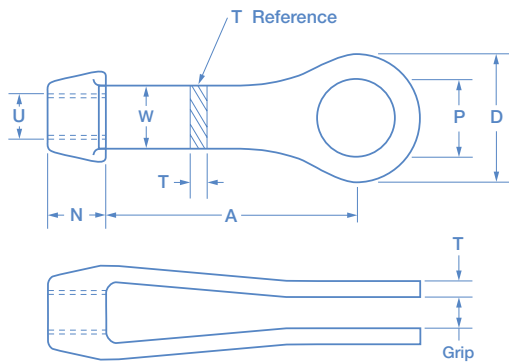
TOGETHER, WE BUILD GREAT THINGS.



Progressive Field (Cleveland, Ohio USA)



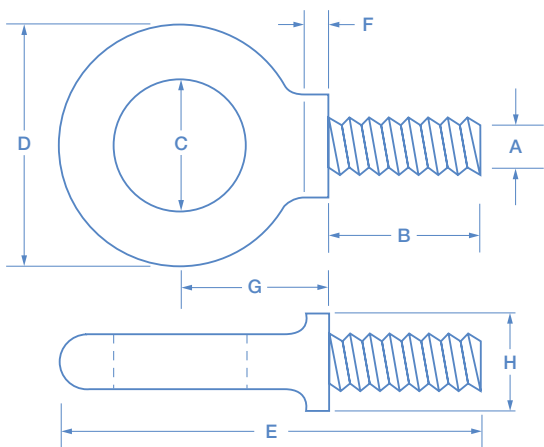
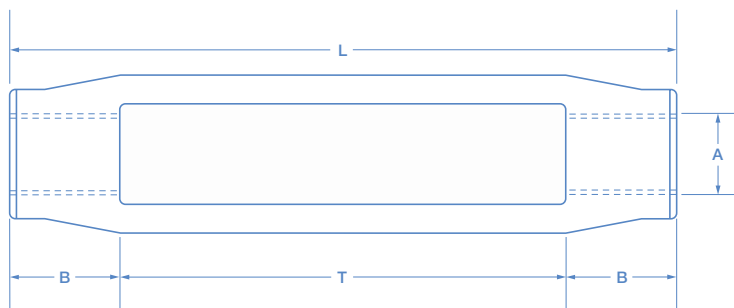
www.ClevelandCityForge.com



CLEVELAND CITY FORGE

SINCE 1864

FORGED STEEL STRUCTURAL HARDWARE





SINCE 1864

FORGED STEEL STRUCTURAL HARDWARE



CONTACT



46950 State Route 18 West
Wellington, OH 44090

800-431-4350

440-647-5400

Fax: 440-647-4185

info@ccforge.com

www.ClevelandCityForge.com



ccforge



cc_forge

CONTENTS

Applications.....	2-3
Clevises	4-5
Clevis Pins	5
Eyebolts.....	9-11
Eye Nuts	12
Nuts	18
Recessed Nuts & Pins	19
Rod Ends.....	13
Swage Sockets	14-15
Threaded Rods.....	16
Turnbuckles & Turnbuckles with Stubs	6-7
Turnbuckle Assemblies	8
Yoke Ends & Yoke Pins.....	17
Terms & Conditions	20

For over 150 years, **Cleveland City Forge** has maintained an incredible history of consistent quality in the forged steel structural hardware industry. Founded in 1824, Cleveland City Forge quickly built a reputation for applying **innovative manufacturing methods** with precise engineering to produce quality products that withstand the test of time.

In the early years, Cleveland City Forge focused on manufacturing structural hardware for the marine industry. By the late 1920's, Cleveland City Forge expanded the product line to include clevises and turnbuckles to support the flourishing construction market.

As the demand for **forged steel structural hardware** continued to grow, it became apparent that product standards had to be developed. Recognizing this in the early 1950's, ASTM in partnership with Cleveland City Forge, developed clevis and turnbuckle quality and performance standards. Those standards still remain in place today.

Currently, Cleveland City Forge produces the following forged and machined standard products: Clevises, Pins, Turnbuckles, EyeNuts, Eyebolts, Yokes, Swages and Thread Rods. In addition, we have the capability to produce custom parts to exact specifications. All products are produced in Carbon Steel, Stainless Steel, S182 F11, and S182 F22 materials. Finish options include Galvanized, Electro-Polished and Zinc Plated.

Cleveland City Forge has established themselves as a **manufacturing leader** in forged steel structural hardware. We are constantly re-examining our capabilities and processes to ensure that our company is as strong and vital in the future as we were back in 1864 when we started.



SINCE 1864

FORGED STEEL STRUCTURAL HARDWARE

800-431-4350

info@ccforge.com

www.ClevelandCityForge.com



ccforge



cc_forge

TOGETHER, WE BUILD GREAT THINGS.

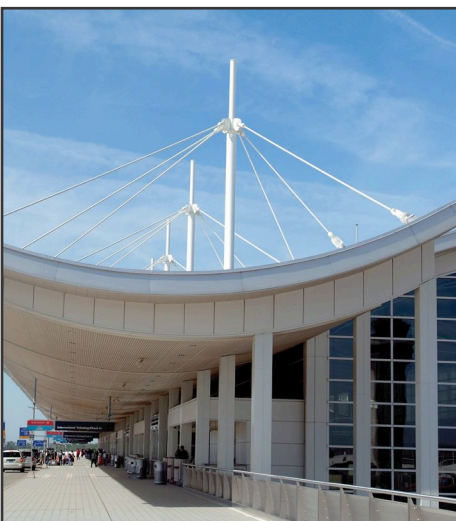
For over 150 years, **Cleveland City Forge** has been manufacturing standard and custom **forged steel structural hardware** for the Construction, Mining, and Power Generation Industries. CCF is proud to have partnered with those companies that shape our communities and strengthen our nation's infrastructure.



**Progressive Field
(Cleveland, Ohio USA)**



The main support columns of the Cleveland Indians Baseball Stadium are reinforced with a cross-bracing system that include CCF Clevises and Threaded Rods



**Detroit Metropolitan Airport
(Detroit, Michigan USA)**



As the Detroit Metro Airport continues to expand its air service, renovation projects such as this overhead structure continue to improve the efficiency of the airport. CCF Clevises and Pins were used to complete this project.



SINCE 1864

FORGED STEEL STRUCTURAL HARDWARE

800-431-4350

info@ccforge.com

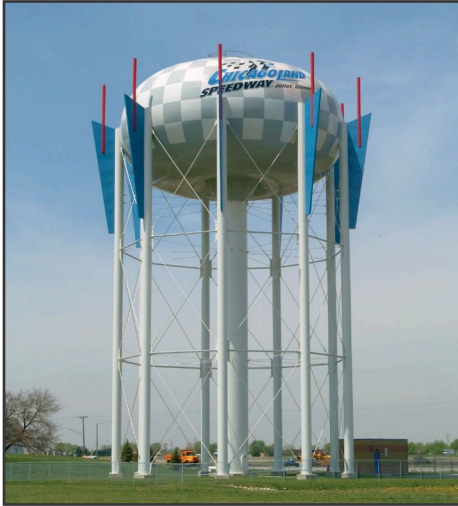
www.ClevelandCityForge.com



ccforge



cc_forge



Chicagoland Speedway (Joliet, Illinois USA)



Towering over 130 feet above the Chicagoland Speedway, this NASCAR inspired water tower was constructed with CCF Clevises and Turnbuckles.



Richmond-San Rafael Bridge (Richmond, California USA)

Spanning 5.5 miles over the San Francisco Bay, this bridge underwent a seismic retrofit program that utilizes CCF Clevises, Turnbuckles and Structural Bolts.



Power Generation (Worldwide)



CCF provides forged steel structural hardware to Global Power Manufacturers that design, construct and operate power generation plants worldwide.



SPECIFICATIONS

Material: C-1035, SA-182-F11, F22, Stainless Steel

Threads: U.N.C./U.N.F. Class 2B, Right or Left Hand, Metric

Finish: Self-Colored, Galvanized, Plated, Electro-Polished

Options: Heat Treating, Special Threading

Note: Pins Sold Separately - Straight or Headed

100% Domestic Materials, Certifications Provided Upon Request

CCF CLEVISES

Our clevises are manufactured to meet the dimensional and load ratings in accordance to the American Institute of Steel Construction (AISC)

Manual of Steel Construction. Carbon and alloy steel clevises are forged per ASTM A668, Stainless steel clevises are forged per ASTM A473.

Cleveland City Forge clevises meet state and federal safety and funding standards and project specifications from the world's leading engineering and architectural firms, ensuring the quality and timeliness demanded in today's competitive world.

Length adjustment for Clevis and Rod Assembly may be achieved by RH/LH thread pairing or by the use of Cleveland City Forge Turnbuckle Assemblies in combination with Tie Rod and Clevis Assembly.

WORKING LOADS

Maximum working loads have been established with a design factor of 5:1 using the maximum pin diameter, the resulting net area of the eye at the pin hole, and the expected ultimate tensile strength of C-1035 steel. The maximum tap size (U dimension) shown in **Table I** is for reference purposes only and should be used only to determine the largest tap diameter the clevis may accommodate without considering the pin diameter. Use **Table II** to select the proper combination of tap size and pin diameter for any given size of clevis.

ORDER REQUIREMENTS:

- Use Table I to specify your order by choosing your application rod size (maximum tap size U in Table I) and maximum working load, which should be less than the Rated Capacity in Table I.
- Specify LH or RH thread.
- Specify material.
- Specify finish.
- Specify applicable pin order with Cleveland City Forge Clevis Pins.



Vancouver International Airport
(Richmond, British Columbia,
Canada)

Listed as one of the top 10 airports in the world, Vancouver International Airport completed an expansion program that utilized CCF Clevises and Threaded Rods.

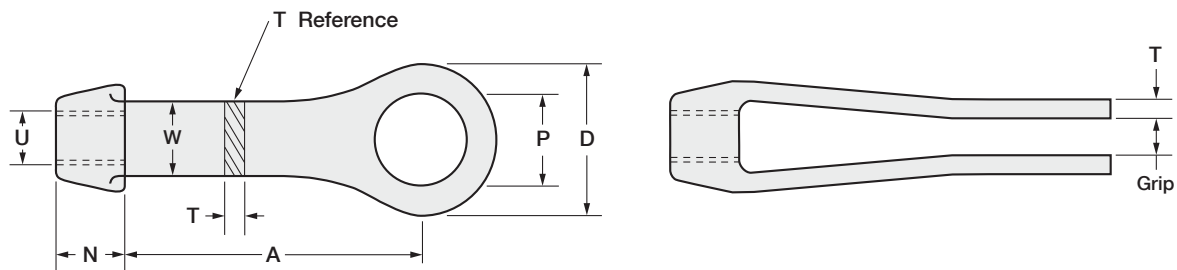


Table I: Standard Clevis Dimensions (Inches)

Part No.	Clevis No.	D	N	Thd. Max. U	W	T	A	Pin Max. P	Rated Capacity (Lbs.)	Unit Wt. (Lbs.)
CL20	2	1 7/16	5/8	5/8	1 1/16	5/16 + 1/32-0	3 9/16	3/4	3500	1
CL25	2 1/2	2 1/2	1	7/8	1 1/4	5/16 + 1/32-0	4	1 1/2	7500	2 1/2
CL30	3	3	1 1/4	1 3/8	1 1/2	1/2 + 1/16-1/32	5 1/16	1 3/4	15000	4
CL35	3 1/2	3 1/2	1 1/2	1 1/2	1 3/4	1/2 + 1/16-1/16	6	2	18000	6
CL40	4	4	1 3/4	1 3/4	2	1/2 + 1/16-1/16	5 15/16	2 1/4	21000	9
CL50	5	5	2 1/4	2 1/8	2 1/2	5/8 + 3/32-0	7	2 1/2	37500	16
CL60	6	6	2 3/4	2 1/2	3	3/4 + 3/32-0	8	3	54000	26
CL70	7	7	3	3	3 1/2	7/8 + 1/8-1/16	9	3 3/4	68500	36
CL80	8	8	4	4	4	1 1/2 + 1/8-1/16	10 1/8	4 1/4	135000	90

Table II: Diameter of Pin (Inches)

Dia. of Tap	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4
3/8	2	2	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1/2	2	2	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
5/8	2	2	2	2 1/2	2 1/2	2 1/2	2 1/2	•	•	•	•	•	•	•	•	•	•	•
3/4	•	•	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	•	•	•	•	•	•	•	•	•	•	•
7/8	•	•	•	2 1/2	2 1/2	2 1/2	2 1/2	3	•	•	•	•	•	•	•	•	•	•
1	•	•	•	•	3	3	3	3	•	•	•	•	•	•	•	•	•	•
1 1/8	•	•	•	•	3	3	3	3	3 1/2	•	•	•	•	•	•	•	•	•
1 1/4	•	•	•	•	3	3	3	3	3 1/2	•	•	•	•	•	•	•	•	•
1 3/8	•	•	•	•	•	3	3	3 1/2	3 1/2	4	•	•	•	•	•	•	•	•
1 1/2	•	•	•	•	•	3 1/2	3 1/2	4	4	5	•	•	•	•	•	•	•	•
1 5/8	•	•	•	•	•	4	4	4	5	5	5	•	•	•	•	•	•	•
1 3/4	•	•	•	•	•	•	4	5	5	5	5	•	•	•	•	•	•	•
1 7/8	•	•	•	•	•	•	5	5	5	5	5	•	•	•	•	•	•	•
2	•	•	•	•	•	•	5	5	5	5	5	6	6	•	•	•	•	•
2 1/8	•	•	•	•	•	•	•	5	5	6	6	6	6	6	•	•	•	•
2 1/4	•	•	•	•	•	•	•	•	6	6	6	6	6	7	7	•	•	•
2 3/8	•	•	•	•	•	•	•	•	6	6	6	6	7	7	7	7	•	•
2 1/2	•	•	•	•	•	•	•	•	6	6	6	7	7	7	7	7	•	•
2 5/8	•	•	•	•	•	•	•	•	•	•	7	7	7	7	7	8	•	•
2 3/4	•	•	•	•	•	•	•	•	•	•	7	7	7	7	8	8	•	•
2 7/8	•	•	•	•	•	•	•	•	•	•	7	8	8	8	8	8	8	8
3	•	•	•	•	•	•	•	•	•	•	7	8	8	8	8	8	8	8
3 1/8	•	•	•	•	•	•	•	•	•	•	•	8	8	8	8	8	8	8
3 1/4	•	•	•	•	•	•	•	•	•	•	•	8	8	8	8	8	8	8
3 3/8	•	•	•	•	•	•	•	•	•	•	•	8	8	8	8	8	8	8
3 1/2	•	•	•	•	•	•	•	•	•	•	•	•	8	8	8	8	8	8
3 5/8	•	•	•	•	•	•	•	•	•	•	•	•	•	8	8	8	8	•
3 3/4	•	•	•	•	•	•	•	•	•	•	•	•	•	8	8	8	8	•
3 7/8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	8	8	8	•
4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	8	8	•	•

CLEVIS PIN - STRAIGHT OR HEADED



SPECIFICATIONS

Material: C-1035, SA-182-F-11, F22, Stainless Steel

Finish: Self-Colored, Galvanized, Plated, Electro-Polished

Options: Other Carbon or Alloy Material, Heat Treating

Note: Since pin diameters and lengths may vary due to the size and grip of the clevis, please provide specific pin dimensions.



SPECIFICATIONS

Material: C-1030/C-1035, 316 Stainless Steel, SA-182-F11, F22

Threads: U.N.C./U.N.F. Class 2B, Metric

Finish: Self-Colored, Galvanized, Plated, Electro-Polished

Options: Heat Treating, Special Threading

Note: 100% Domestic Materials, Certifications Provided Upon Request

CCF TURNBUCKLES

Turnbuckles are drop forged from special bar quality steel, threaded right and left hand Class 2B and supplied either plain finish to hot-dip galvanized. Galvanizing meets or exceeds requirements of ASTM Specification A 153. Stubs are made from Hot Rolled Mild Carbon Steel.

WORKING LOADS

Maximum working loads have been established with a design factor of 5:1 and are calculated using C-1030/C-1035 Carbon Steel. Maximum Working load results on other materials offered are available upon request. The loads imposed upon any turnbuckle should never exceed the maximum working load shown. Selection of a turnbuckle with a maximum working load adequate to meet the required design load is the responsibility of each purchaser or end user. CCF turnbuckles meet the requirements of ASTM F1145-92 Type 1 Grade 1, up to 2 1/2".

ORDER REQUIREMENTS

- Specify Diameter and take up needed
- Specify Material Required
- Specify finish

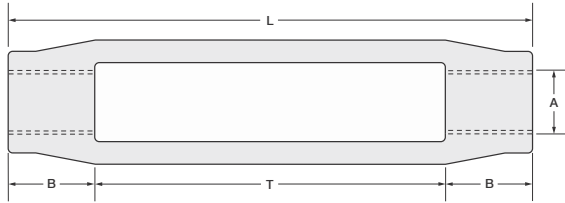
Turnbuckles are furnished with hex ends to 2".
Round ends furnished 2-1/4" and larger.



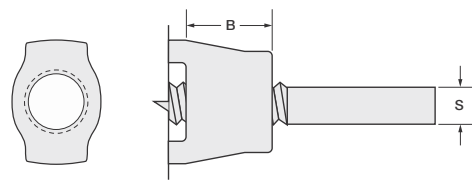
**RTA Train Station
(Cleveland, Ohio USA)**

The Lakefront train has two massive glass awnings to protect riders from the constantly changing Cleveland weather. The combination of CCF Clevises, Turnbuckles and Threaded Rods were used to support this structure. The entire unit is painted white to blend with the environment.

Turnbuckle Body



Turnbuckle Stub



Part No.	Turnbuckle			Body Length (Inches) L	Nut End B	Length of One Stub (inches) S	Rated Capacity (Lbs.)	Unit Weight (Lbs.)
	Thread Dia. A	x	Take Up T					
TB01	3/8	x	6	7 1/8	9/16	8	1200	0.78
TB03	1/2	x	3	4 7/8	15/16	8	2200	1.38
TB04	1/2	x	4	5 9/16	25/32	8	2200	1.68
TB05	1/2	x	6	7 9/16	25/32	8	2200	1.38
TB06	1/2	x	9	10 9/16	25/32	9 1/2	2200	1.75
TB07	1/2	x	12	13 9/16	25/32	11	2200	2.25
TBX8	5/8	x	3	4 7/8	15/16	8	3500	2.14
TB08	5/8	x	4	5 7/8	15/16	8	3500	2.18
TB09	5/8	x	6	7 7/8	15/16	8	3500	2.23
TB10	5/8	x	9	10 7/8	15/16	9 1/2	3500	2.90
TB11	5/8	x	12	13 7/8	15/16	11	3500	3.20
TB13	3/4	x	6	8 1/8	1 1/16	8 1/2	5200	3.28
TB14	3/4	x	9	11 1/8	1 1/16	10	5200	4.05
TB15	3/4	x	12	14 1/8	1 1/16	11 1/2	5200	4.81
TB18	7/8	x	6	8 5/8	1 5/16	9	7200	4.50
TB19	7/8	x	12	14 7/8	1 7/16	12	7200	6.70
TB21	1	x	6	8 7/8	1 7/16	9 1/2	9300	6.32
TB22	1	x	12	14 7/8	1 7/16	12 1/2	9300	8.90
TB26	1 1/8	x	6	9 1/8	1 9/16	9 1/2	11600	4.06
TB27	1 1/8	x	12	15 1/8	1 9/16	13	15200	9.74
TB29	1 1/4	x	6	9 1/8	1 9/16	10	15200	4
TB30	1 1/4	x	12	15 1/8	1 9/16	13	15200	9.74
TB33	1 3/8	x	6	9 5/8	1 13/16	10 1/12	17400	6.15
TB34	1 3/8	x	12	15 3/4	1 7/8	13 1/2	17400	9.7
TB35	1 1/2	x	6	9 3/4	1 7/8	10 1/2	21000	6.15
TB36	1 1/2	x	12	15 3/4	1 7/8	13 1/2	21000	9.74
TB39	1 5/8	x	6	11	2 1/2	11	24500	9.8
TB40	1 5/8	x	12	17 1/2	2 3/4	14	26000	15.25
TB41	1 3/4	x	6	11	2 1/2	11	28000	9.8
TB42	1 3/4	x	12	17	2 1/2	14	28000	15.25
TB45	1 7/8	x	6	11 5/8	2 13/16	11 1/2	37000	14
TB46	1 7/8	x	12	17 1/2	2 3/4	14 1/2	37000	15.25
TB49	2	x	6	11 5/8	2 13/16	11 1/2	37000	14
TB50	2	x	12	17 1/2	2 3/4	14 1/2	37000	15.25
TB53	2 1/4	x	6	12 5/8	3 5/16	12	48000	19.6
TB54	2 1/4	x	12	19 5/8	3 13/16	16	48000	30.92
TB57	2 3/8	x	6	13 1/2	3 3/4	13	52500	23.25
TB58	2 1/2	x	6	13 1/2	3 3/4	13	60000	23.25
TB59	2 1/2	x	12	19 1/2	3 3/4	16	60000	30.92
TB63	2 3/4	x	6	14 3/8	4 3/16	13 1/2	75000	31.5
TB65	2 3/4	x	12	22 1/2	5 1/4	18 1/2	79000	60.5
TB67	2 7/8	x	6	14 3/4	4 3/8	14	79400	39.5
TB68	3	x	6	14 5/8	4 5/16	14	96700	39.5
TB70	3	x	12	22 1/2	5 1/4	18 1/2	100000	60.5
TB80	3 1/4	x	6	16 7/8	5 7/16	15 1/2	104000	60.5
TB82	3 1/4	x	12	22 1/2	5 1/4	18 1/2	104000	79.5
TB85	3 1/2	x	6	16 7/8	5 7/16	15 1/2	122200	60.5
TB87	3 1/2	x	12	22 1/2	5 1/4	18 1/2	122200	79.5
TB88	3 3/4	x	6	18	6	16 1/2	167800	95
TB93	4	x	6	18	6	16 1/2	167800	95
TB98	4 1/2	x	9	22 1/2	6 3/4	19	233800	152

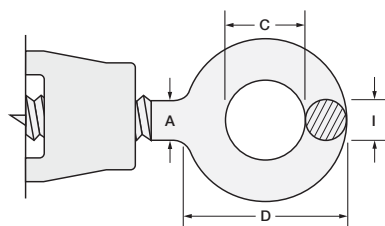
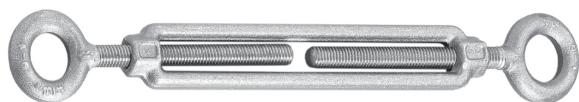
SPECIFICATIONS

Material: C-1045, Stainless Steel

Threads: U.N.C, Right and Left Hand

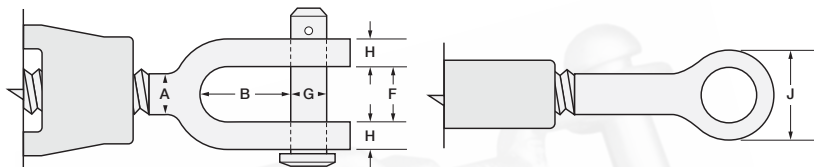
Finish: Self-Colored, Galvanized, Zinc, Electro Polished

Eye and Eye



Part No.	Turnbuckle			Eye			Overall Closed Length	Rated Capacity (Lbs.)	Unit Weight (Lbs.)
	Thread Dia.	Take Up		C	D	I			
A	T								
TBEE006	3/8	x	6	3/4	1 1/2	3/8	11 7/8	1200	0.79
TBEE008	1/2	x	6	1	2	7/16	13	2100	1.51
TBEE008-2	1/2	x	9	1	2	7/16	17 1/2	2100	1.81
TBEE008-3	1/2	x	12	1	2	7/16	20 1/2	2100	2.20
TBEE010	5/8	x	6	1 1/4	2 1/2	9/16	16	3200	2.50
TBEE010-2	5/8	x	9	1 1/4	2 1/2	9/16	19 1/4	3200	3.00
TBEE010-3	5/8	x	12	1 1/4	2 1/2	9/16	21 3/4	3200	3.60
TBEE012	3/4	x	6	1 1/2	3	21/32	17 3/4	5000	3.90
TBEE012-2	3/4	x	9	1 1/2	3	21/32	20 3/4	5000	4.60
TBEE012-3	3/4	x	12	1 1/2	3	21/32	23 3/4	5000	5.30
TBEE014	7/8	x	12	1 3/4	3 1/2	3/4	27 1/4	7000	7.60
TBEE100	1	x	6	2	4	7/8	21 1/4	10000	7.50
TBEE100-2	1	x	12	2	4	7/8	26 5/8	10000	10.00

Jaw and Jaw

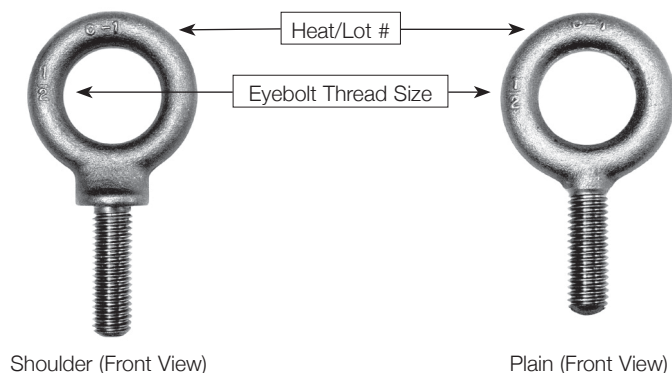


Part No.	Turnbuckle			Jaw					Overall Closed Length	Rated Capacity (Lbs.)	Unit Weight (Lbs.)
	Thread Dia.	Take Up		F	B	G	H	J			
A	T										
TBJJ006	3/8	X	6	9/16	13/16	5/16	5/16	13/16	12	1200	0.85
TBJJ008	1/2	X	6	5/8	1	3/8	3/8	1	13	2100	1.64
TBJJ008-2	1/2	X	9	5/8	1	3/8	3/8	1	16	2100	1.95
TBJJ008-3	1/2	X	12	5/8	1	3/8	3/8	1	19	2100	2.40
TBJJ010	5/8	X	6	13/16	1 5/16	1/2	1/2	1 5/16	16	3200	2.75
TBJJ010-2	5/8	X	9	13/16	1 5/16	1/2	1/2	1 5/16	19	3200	3.25
TBJJ010-3	5/8	X	12	13/16	1 5/16	1/2	1/2	1 5/16	22	3200	4.00
TBJJ012	3/4	X	6	15/16	1 1/2	5/8	1/2	1 5/8	17	5000	4.50
TBJJ012-2	3/4	X	9	15/16	1 1/2	5/8	1/2	1 5/8	20	5000	4.98
TBJJ012-3	3/4	X	12	15/16	1 1/2	5/8	1/2	1 5/8	23	5000	5.78
TBJJ014	7/8	X	12	1 1/8	1 3/4	3/4	5/8	1 13/16	25	7000	8.75
TBJJ100	1	X	6	1 5/16	2	7/8	3/4	1 15/16	18	10000	9.20
TBJJ100-2	1	X	12	1 5/16	2	7/8	3/4	1 15/16	24	10000	12.10

EYEBOLT INFORMATION

Cleveland City Forge Machinery Eyebolts are manufactured to ASME B18.15 and tested to ASTM A489 specifications.

EYEBOLT TRACEABILITY MARKINGS

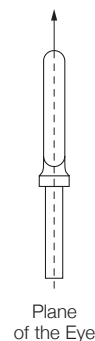


Material Data

Material	Carbon Steel
Heat Treat	Quench and Draw
Grain Size	5 or finer
Tensile	65,000 PSI MIN - 90,000 PSI MAX
Yield	30,000 PSI MIN
Elongation	30% MIN
Reduction of Area	60% MIN
Rated Capacity	See page X

Application/Installation

- The receiving hole should be counter-sunk and be free and clear of any debris to assure proper seating.
- LOADS SHOULD ALWAYS BE ALIGNED TO THE PLANE OF THE EYE, not at an angle to the plane. A steel washer or spacer may be used in conjunction with Shoulder Eyebolts to attain proper load alignment. The thickness of the steel washer or spacer must not exceed one thread pitch.
- Angular lifting should be avoided. **Angular lifts significantly reduce rated capacities.** See Eyebolt Rated Capacities/Guidelines (page 11).
- Check seating after applying an angular lift since the initial lift may cause the bolt to back away from the load. If such occurs, the Eyebolt should be unloaded & properly resealed.
- For applications with untapped through-holes, longer length Shoulder Eyebolts are recommended, using a steel washer and nut for the required thread length of engagement.
- Shoulder Eyebolt tapped holes are to have a threaded length which allows for full length of shank engagement and clearance for the unthreaded portion of shank.
- Shoulder Eyebolts must be firmly seated and flush against the mating surface; otherwise, the rated capacity is reduced significantly. The use of a steel washer or spacer is permissible and may be required; however, the thickness must not exceed one thread pitch.
- Plain Eyebolt tapped holes are to be threaded for full length engagement of the Eyebolt.
- Plain Eyebolts must have full thread shank engagement, allowing for one-half turn for proper eye-alignment to obtain rated capacities.



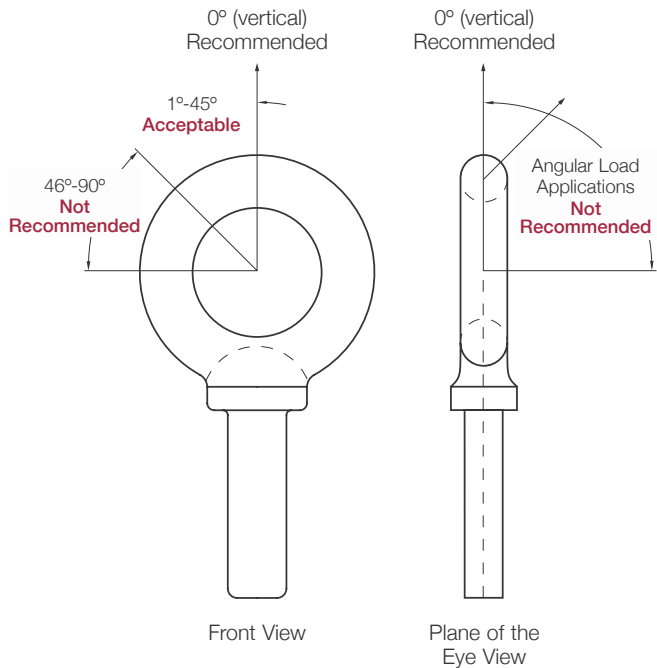
Inspection/Maintenance Safety

- Eyebolts should be inspected and installed by a competent person who is knowledgeable about the application and installation of Eyebolts.
- Each Eyebolt must be completely inspected BEFORE each use for possible defects such as: distortion, bent shank/ threads, or incomplete/incorrectly formed threads. Periodic inspection of Eyebolts is highly recommended.
- Eyebolts should not be painted or otherwise coated when used for lifting; such coatings make it difficult to inspect for defects or wear indicators.
- Eyebolts should not be left where they can incur mechanical damage or corrosion.
- **Destroy Eyebolts when signs of bend, elongation, wear or damage are visible.** Such signs indicate that the Eyebolt has been stressed (overloaded) beyond rated capacity. Never attempt to repair a stressed Eyebolt.
- **Destroy Eyebolts when they show any signs of alteration.** Signs include: gouging, undercutting, welding, etc.
- **Proper Destruction of an Eyebolt:** crushing or cutting clear across the eye of the Eyebolt.

EYEBOLT INFORMATION

Safety Precautions

- **DO NOT** work, stand or crawl around the load of the Eyebolt. Ensure a safe distance from the load.
- **DO NOT** use wrenches, crowbars, etc. to tighten Eyebolts. Hand tightening is recommended.
- **DO NOT** use a single Eyebolt to lift a load that can rotate.
- **DO NOT** force hooks or any other fittings into the eye; they must fit freely.
- **DO NOT** exceed the Rated Capacity.
- **DO NOT SHOCK LOAD EYEBOLTS.** Gradually increase lifting of the load to minimize load-shock.
- **DO NOT** weld Eyebolts, or perform any weld-repair on Eyebolts.
- **DO NOT** machine Eyebolts on the shank or shoulder to achieve proper seating.
- **DO NOT** expose Eyebolts to extreme environmental conditions, as they may adversely affect the Rated Capacity.



Shoulder Eyebolt Rated Capacities

Size	0° Lbs.	45° Lbs.
1/4	500	125
5/16	900	225
3/8	1,300	325
7/16	1,800	450
1/2	2,400	600
9/16	3,000	800
5/8	4,000	1,000
3/4	5,000	1,250
7/8	7,000	1,750
1	9,000	2,250
1 1/8	12,000	3,000
1 1/4	15,000	3,750
1 1/2	21,000	5,250
1 3/4	28,000	7,000
2	38,000	9,500
2 1/2	56,000	14,000

NOTE: Plain Eyebolt angular rated capacities are significantly lower than Shoulder Eyebolt rated capacities; therefore, angular lifting is not recommended.

Eyebolt Rated Capacity Guidelines

- The minimum threaded shank length of Eyebolts must be one thread diameter to attain the rated capacity.
- No greater load should be applied to an Eyebolt than the Rated Capacity listed.
- **Angular lifts significantly reduce Shoulder Eyebolt Rated Capacities.** Shoulder Eyebolts should not be used for angular lifts greater than 45°.
- **Plain Eyebolts are not recommended for angular load applications.**





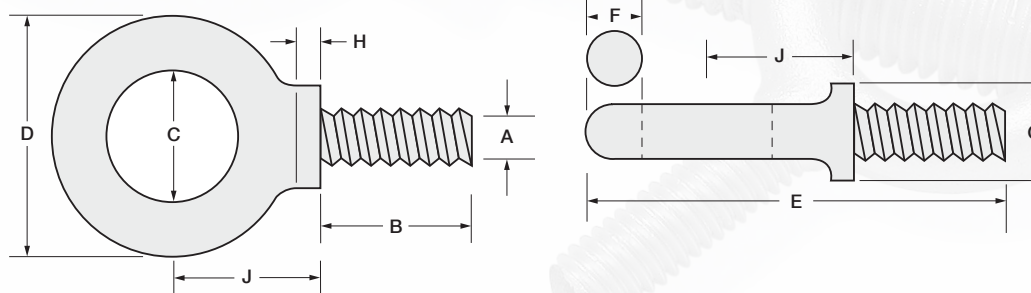
SPECIFICATIONS

Material: C-1035, SA-182-F-11, Stainless Steel

Threads: U.N.C./U.N.F. Class 2 A, Right or Left Hand, Metric

Finish: Self-Colored, Galvanized, Plated, Electro-Polished

Options: Heat Treating, Special Threading



Stock No.		A	B	C	D	Overall Length		F	G	H	J	Rated Capacity Lbs.	Thread Size UNC-2A
Shoulder	Plain	Shank Dia.	Shank Length	Eye I.D.	Eye O.D.	Shoulder	Plain	Eye Sect Dia.	Shldr. Dia.	Shldr. Thick.	Loc.		
BES004	BEP004	0.25	1.00 1.06	0.69 0.81	1.19	2.22 2.53	2.06 2.38	0.19 0.25	0.50 0.56	0.12 0.19	0.69 0.81	500	1/4-20
BES005	BEP005	0.31	1.12 1.19	0.81 0.94	1.44	2.66 2.97	2.44 2.75	0.25 0.31	0.56 0.62	0.12 0.19	0.88 1.00	900	5/16-18
BES006	BEP006	0.38	1.25 1.38	0.94 1.06	1.69	3.09 3.47	2.81 3.19	0.31 0.38	0.62 0.69	0.12 0.19	1.06 1.19	1,300	3/8-16
BES007	BEP007	0.44	1.38 1.50	1.00 1.12	1.81	3.41 3.78	3.06 3.44	0.34 0.41	0.75 0.81	0.19 0.25	1.19 1.31	1,800	7/16-14
BES008	BEP008	0.50	1.50 1.62	1.12 1.25	2.12	3.81 4.19	3.50 3.88	0.44 0.50	0.88 0.94	0.19 0.25	1.31 1.44	2,400	1/2-13
BES009	BEP009	0.56	1.62 1.75	1.19 1.31	2.25	4.19 4.56	3.75 4.12	0.47 0.53	0.94 1.00	0.22 0.28	1.50 1.62	3,000	9/16-12
BES010	BEP010	0.62	1.75 1.88	1.31 1.44	2.56	4.56 4.94	4.19 4.56	0.56 0.62	1.00 1.06	0.25 0.31	1.59 1.72	4,000	5/8-11
BES012	BEP012	0.75	2.00 2.12	1.44 1.56	2.81	5.06 5.50	4.69 5.06	0.62 0.69	1.12 1.25	0.25 0.31	1.72 1.91	5,000	3/4-10
BES014	BEP014	0.88	2.25 2.38	1.56 1.69	3.19	5.75 6.19	5.31 5.69	0.75 0.81	1.31 1.44	0.31 0.38	2.03 2.22	7,000	7/8-9
BES100	BEP100	1.00	2.50 2.62	1.69 1.81	3.56	6.44 6.88	5.94 6.31	0.88 0.94	1.50 1.62	0.38 0.44	2.22 2.41	9,000	1-8
BES102	BEP102	1.12	2.75 2.88	1.94 2.06	4.06	7.31 7.75	6.69 7.06	1.00 1.06	1.69 1.81	0.44 0.50	2.59 2.78	12,000	1 1/8-7
BES104	BEP104	1.25	3.00 3.12	2.12 2.25	4.44	8.00 8.44	7.31 7.69	1.09 1.16	1.88 2.00	0.50 0.56	2.84 3.03	15,000	1 1/4-7
BES108	BEP108	1.50	3.50 3.62	2.44 2.56	5.19	9.22 9.72	8.56 8.94	1.31 1.38	2.12 2.25	0.50 0.62	3.19 3.44	21,000	1 1/2-6
BES112	BEP112	1.75	3.75 3.88	2.75 3.00	6.00	10.50 11.12	9.50 10.12	1.50 1.62	2.50 2.62	0.50 0.62	3.88 4.12	28,000	1 3/4-5
BES200	BEP200	2.00	4.00 4.12/4.25	3.06 3.44	6.88	11.53 12.22	10.56 11.44	1.75 1.88	2.88 3.00	0.62 0.75	4.25 4.50	38,000	2-4 1/2
BES208	BES208	2.50	5.00 5.25	3.81 4.19	8.50	14.59 15.40	13.19 14.06	2.19 2.31	3.62 3.68	0.88 1.00	5.50 5.75	56,000	2 1/2-4



SPECIFICATIONS

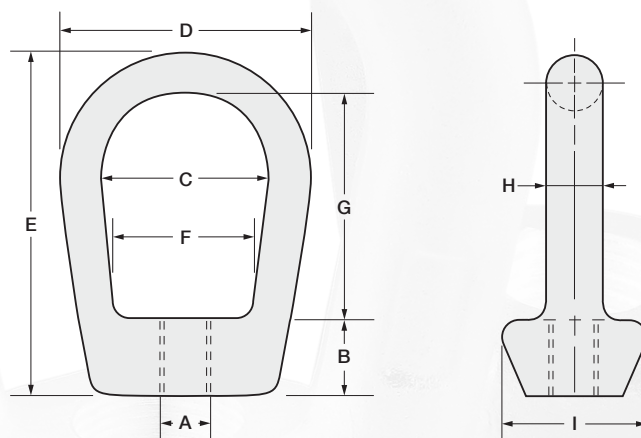
Material: C-1030, C-1035, 316 Stainless Steel

Threads: U.N.C., U.N.F. Class 2B, Right or Left Hand, Metric

Finish: Self-Colored, Galvanized, Zinc Plated, Electro-Polished

Options: Heat Treating, Class C, D, F, Special Threading

Note: Supports loads equal to the full limitation of the hanger rod



Part No. Tapped RH	Tap Size A	Bail Size	Thread Length B	I. D. C	O. D. D	Overall Length E	Bell F	I. D. Length G	Bail Thickness H	Shoulder Width I	Rated Capacity (Lbs.)	Unit Weight (Lbs.)
NE05-1	3/8	1/2	5/8	1 1/4	1 3/4	2 1/2	13/16	1 9/16	3/8	31/32	2900	0.26
NE05-2	1/2	1/2	5/8	1 1/4	1 3/4	2 1/2	13/16	1 9/16	3/8	31/32	3500	0.31
NE10-1	3/8	1	11/16	1 1/2	2 1/4	3 3/16	1 3/16	2	1/2	1 3/8	2900	0.63
NE10-2	1/2	1	11/16	1 1/2	2 1/4	3 3/16	1 3/16	2	1/2	1 3/8	5200	0.61
NE10-3	5/8	1	11/16	1 1/2	2 1/4	3 3/16	1 3/16	2	1/2	1 3/8	5500	0.59
NE10-4	3/4	1	11/16	1 1/2	2 1/4	3 3/16	1 3/16	2	1/2	1 3/8	5500	0.56
NE20-1	7/8	2	1	2	3 1/4	4 3/8	1 11/16	2 5/8	3/4	1 15/16	11000	1.72
NE20-2	1	2	1	2	3 1/4	4 3/8	1 11/16	2 5/8	3/4	1 15/16	11000	1.67
NE30-1	1 1/8	3	1 1/4	2 1/2	4 1/4	5 5/8	1 13/16	3 3/8	1	2 3/8	20000	3.64
NE30-2	1 1/4	3	1 1/4	2 1/2	4 1/4	5 5/8	1 13/16	3 3/8	1	2 3/8	20000	3.55
NE30-3	1 1/2	3	1 1/4	2 1/2	4 1/4	5 5/8	1 13/16	3 3/8	1	2 3/8	22000	3.45
NE40-1	1 3/4	4	2 1/4	4	6 1/2	10	4	6 1/4	1 1/2	4	40000	16.57
NE40-2	2	4	2 1/4	4	6 1/2	10	4	6 1/4	1 1/2	4	42000	16.14
NE40-3	2 1/4	4	2 1/4	4	6 1/2	10	4	6 1/4	1 1/2	4	45000	15.62
NE40-4	2 1/2	4	2 1/4	4	6 1/2	10	4	6 1/4	1 1/2	4	52000	15.06





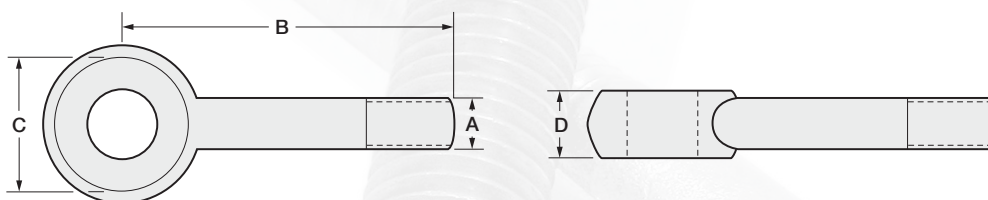
SPECIFICATIONS

Material: C-1030/C-1035, 4140, Stainless Steel

Threads: U.N.C. Class 2A, Right or Left Hand, Metric

Finish: Self-Colored, Galvanized, Plated

Options: Other Carbon or Alloys, Heat Treating, Special Threading



Part No.	A	B	C	D	Unit Weight (Lbs.)
REB005300K-0001	5/16	1 1/2	19/32	11/32	0.05
REB006300K-0001	3/8	3 1/2	3/4	7/16	0.25
REB006300K-0002	3/8	6	3/4	7/16	0.25
REB007300K-0001	7/16	6	7/8	1/2	0.33
REB007300K-0002	7/16	12	7/8	1/2	0.59
REB008300K-0001	1/2	3 1/2	31/32	9/16	0.33
REB008300K-0002	1/2	3 1/2	1 1/8	1/2	0.33
REB008300K-0003	1/2	6	31/32	9/16	0.50
REB008300K-0004	1/2	6	1 1/8	1/2	0.50
REB008300K-0005	1/2	12	31/32	9/16	0.86
REB008300K-0006	1/2	12	1 1/8	1/2	0.86
REB010300K-0001	5/8	3 1/2	1 1/4	11/16	0.55
REB010300K-0002	5/8	6	1 1/4	11/16	0.75
REB010300K-0003	5/8	12	1 1/4	11/16	1.25
REB012300K-0001	3/4	3 1/2	1 1/2	13/16	0.75
REB012300K-0002	3/4	6	1 1/2	13/16	1.25
REB012300K-0003	3/4	12	1 1/2	13/16	1.85
REB014300K-0001	7/8	6	1 13/16	15/16	1.50
REB014300K-0002	7/8	12	1 13/16	15/16	2.60
REB100300K-0001	1	6	2 1/32	1 1/16	2.25
REB100300K-0002	1	12	2 1/32	1 1/16	3.47
REB104300K-0001	1 1/4	12	2 5/8	1 5/16	4.90
REB109300K-0001	1 1/2	12	3	1 1/2	8.75





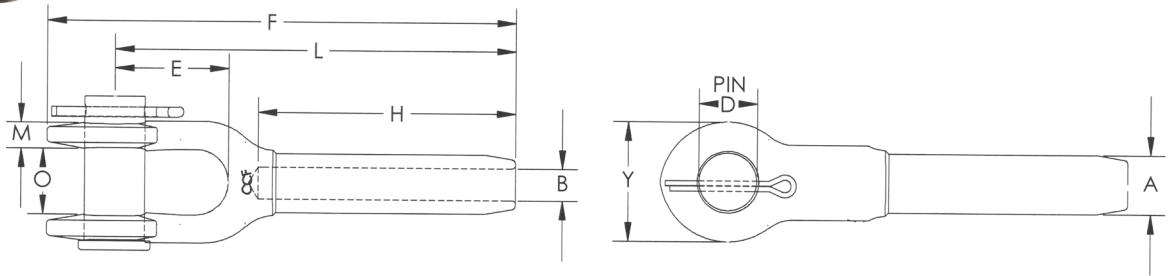
SPECIFICATIONS

OPEN SWAGE SOCKETS

Material: Forged from special C-1035 steel, fine grain, Special bar quality

Finish: Spheroidized annealed for cold swaging

Swage Sockets are recommended for use on 6 x 19 or 6 x 35 IWRC regular lay rope. They are also satisfactory on galvanized bridge rope. They are NOT recommended for use on fiber core or lang lay ropes. Sockets properly applied have an efficiency rating of 100%. This rating is based on the catalog breaking strength of wire rope.



Rope diameter in Inches	Dimensions in Inches										Approx Weight Each in Pounds	A/S
	A	B	D	E	F	H	L	M	O	Y		
1/4"	0.50	0.27	0.69	1.50	4.75	2.13	4.00	0.31	0.69	1.38	0.55	0.438
5/16"	0.77	0.34	0.81	1.75	6.25	3.19	5.31	0.41	0.81	1.63	1.10	0.688
3/8"	0.77	0.41	0.81	1.75	6.25	3.19	5.31	0.41	0.81	1.63	1.08	0.688
7/16"	0.98	0.48	1.00	2.00	7.81	4.25	6.69	0.50	1.00	2.00	2.30	0.875
1/2"	0.98	0.55	1.00	2.00	7.81	4.25	6.69	0.50	1.00	2.00	2.25	0.875
9/16"	1.26	0.61	1.19	2.25	9.56	5.31	8.13	0.63	1.25	2.50	4.60	1.125
5/8"	1.26	0.67	1.19	2.25	9.56	5.31	8.13	0.63	1.25	2.50	4.50	1.125
3/4"	1.55	0.80	1.38	2.75	11.69	6.38	10.00	0.75	1.50	3.00	7.80	1.375
7/8"	1.70	0.94	1.63	3.25	13.63	7.44	11.63	0.94	1.75	3.38	11.70	1.50
1"	1.98	1.06	2.00	3.75	15.63	8.50	13.38	1.03	2.00	4.00	17.80	1.75
1-1/8"	2.25	1.19	2.25	4.25	17.50	9.56	15.00	1.19	2.25	4.50	29.70	2.00
1-1/4"	2.53	1.33	2.50	4.75	19.44	10.63	16.50	1.19	2.50	5.00	36.00	2.25
1-3/8"	2.80	1.45	2.50	5.25	21.25	11.69	18.13	1.31	2.50	5.25	47.00	2.50
1-1/2"	3.08	1.58	2.75	5.75	23.25	12.75	19.75	1.44	3.00	5.75	65.00	2.75
1-3/4"	3.39	1.86	3.50	6.75	27.13	14.88	23.00	1.69	3.50	7.00	93.00	3.00
2"	3.94	2.11	3.75	8.00	31.44	17.00	26.75	1.81	4.00	8.00	145.00	3.50

A/S indicates the proper dimension of A after swaging



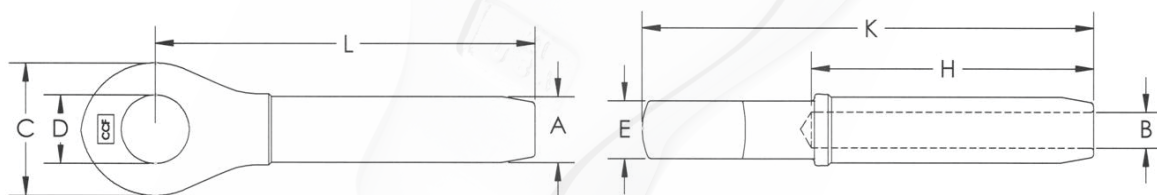
SPECIFICATIONS

CLOSED SWAGE SOCKETS

Material: Forged from special C-1035 steel, fine grain, Special bar quality

Finish: Spheroidized annealed for cold swaging

Swage Sockets are recommended for use on 6 x 19 or 6 x 35 IWRC regular lay rope. They are also satisfactory on galvanized bridge rope. They are NOT recommended for use on fiber core or lang lay ropes. Sockets properly applied have an efficiency rating of 100%. This rating is based on the catalog breaking strength of wire rope.



Rope diameter in Inches	Dimensions in Inches								Approx Weight Each in Pounds	A/S
	A	B	C	D	E	H	K	L		
1/4"	0.50	0.27	1.44	0.75	0.50	2.13	4.38	3.50	0.34	0.438
5/16"	0.77	0.34	1.69	0.88	0.69	3.19	5.50	4.50	0.79	0.688
3/8"	0.77	0.41	1.69	0.88	0.69	3.19	5.50	4.50	0.78	0.688
7/16"	0.98	0.48	2.00	1.06	0.88	4.25	6.94	5.75	1.45	0.875
1/2"	0.98	0.55	2.00	1.06	0.88	4.25	6.94	5.75	1.38	0.875
9/16"	1.26	0.61	2.50	1.25	1.13	5.31	8.75	7.25	2.78	1.125
5/8"	1.26	0.67	2.50	1.25	1.13	5.31	8.75	7.25	2.75	1.125
3/4"	1.55	0.80	3.00	1.44	1.31	6.38	10.38	8.63	5.00	1.375
7/8"	1.70	0.94	3.50	1.69	1.50	7.44	12.13	10.13	7.50	1.50
1"	1.98	1.06	4.00	2.06	1.75	8.50	13.75	11.50	11.20	1.75
1-1/8"	2.25	1.19	4.50	2.31	2.00	9.56	15.25	12.75	15.80	2.00
1-1/4"	2.53	1.33	5.00	2.56	2.25	10.63	17.25	14.38	23.00	2.25
1-3/8"	2.80	1.45	5.50	2.56	2.25	11.69	18.88	15.75	31.00	2.50
1-1/2"	3.08	1.58	5.50	2.81	2.50	12.75	20.38	17.00	39.00	2.75
1-3/4"	3.39	1.86	6.75	3.56	3.00	14.88	24.00	20.00	52.00	3.00
2"	3.94	2.11	7.75	3.81	3.25	17.00	27.50	23.00	90.00	3.50

A/S indicates the proper dimension of A after swaging





SPECIFICATIONS

Material: C-1035, A36, A572 Grade 50, F11, F22, 316 Stainless Steel

Threads: Cut or Roll Thread U.N.C./U.N.F. Class 2A, Right or Left Hand, Metric

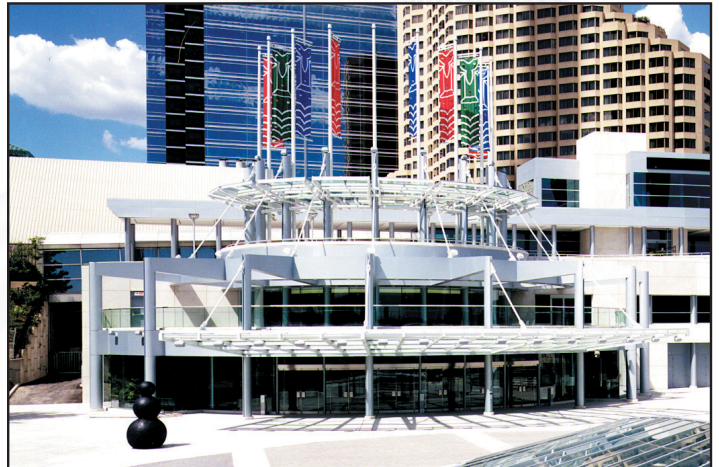
Finish: Self-Colored, Galvanized, Plated, Electro-Polished

Options: Other Material quoted upon request.

Part No.	Size	Weight Per Ft.
RTF006	3/8	0.376
RTF008	1/2	0.668
RTF010	5/8	1.044
RTF012	3/4	1.504
RTF014	7/8	2.046
RTF100	1	2.673
RTF102	1 1/8	3.383
RTF104	1 1/4	4.176
RTF106	1 3/8	5.053
RTF108	1 1/2	6.014
RTF110	1 5/8	7.058
RTF112	1 3/4	8.186
RTF114	1 7/8	9.397
RTF200	2	10.69
RTF204	2 1/4	13.53
RTF206	2 3/8	15.08
RTF208	2 1/2	16.71
RTF212	2 3/4	20.21
RTF214	2 7/8	22.09
RTF300	3	24.06
RTF304	3 1/4	28.23
RTF308	3 1/2	32.74
RTF312	3 3/4	37.59
RTF400	4	42.77

ORDER REQUIREMENTS:

- Specify Rod Material
- Specify Rod Length. Lengths up to 20 feet. Assemblies longer than 20 feet will be paired with a turnbuckle or quoted as a special depending on material availability.
- Specify Thread Length and Thread Direction.



**Metro Toronto Convention Centre
(Toronto, Ontario Canada)**

The glass awning at the South Entrance of the Metro Toronto Convention Centre is supported with CCF Clevises and Threaded Rods.



SPECIFICATIONS

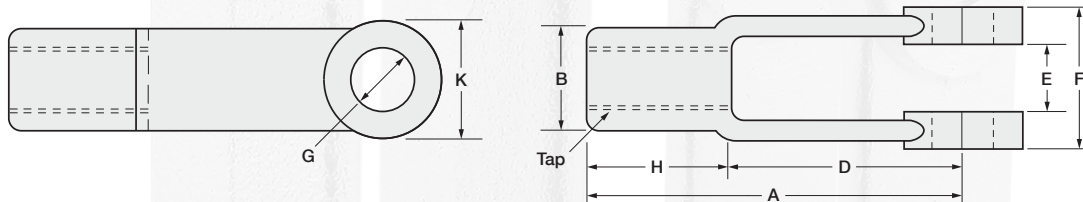
Material: C-1020

Threads: U.N.C. / U.N.F. Class 2B, Right or Left Hand

Finish: Self-Colored, Plated

Options: Special Machining and Threading

ADJUSTABLE YOKE END

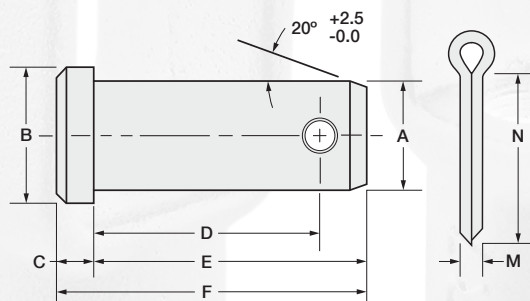


Dimensions In Inches									Tap Size	Unit Weight (Lbs.)
Part No.	A	B	D	E	F	G	H	K		
YA004	2	7/16	1 1/4	9/32	5/8	1/4	3/4	1/2	.250	0.05
YA005	2 1/4	1/2	1 7/16	11/32	3/4	5/16	13/16	19/32	.312	0.08
YA006	2 1/2	5/8	1 5/8	7/16	7/8	3/8	7/8	11/16	.375	0.11
YA007	2 7/8	23/32	1 7/8	1/2	1	7/16	1	13/16	.437	0.18
YA008	3	13/16	1 7/8	9/16	1 1/8	1/2	1 1/8	15/16	.500	0.24
YA010	4 15/16	1 1/16	3 11/16	11/16	1 3/8	5/8	1 1/4	1 3/16	.625	0.46
YA012	6 1/16	1 1/4	4 9/16	13/16	1 5/8	3/4	1 1/2	1 7/16	.750	1.15

YOKE PINS

Material: C-1018

Finish: Self-Colored, Plated



Dimensions In Inches							Cotter Pin		Unit Weight (Lbs.)
Part No.	A	B	C	Min. D	E	F	M	N	
PY004	1/4	3/8	3/32	43/64	49/64	55/64	1/16	7/16	0.02
PY005	5/16	7/16	3/32	13/16	15/16	1 1/32	3/32	1/2	0.03
PY006	3/8	1/2	1/8	15/16	1 1/16	1 3/16	3/32	5/8	0.04
PY007	7/16	9/16	5/32	1 1/16	1 3/16	1 11/32	3/32	3/4	0.06
PY008	1/2	5/8	5/32	1 13/64	1 23/64	1 33/64	1/8	7/8	0.09
PY010	5/8	13/16	13/64	1 29/64	1 39/64	1 13/16	1/8	1	1.75
PY012	3/4	15/16	1/4	1 23/32	1 29/32	2 5/32	5/32	1 1/4	3.00

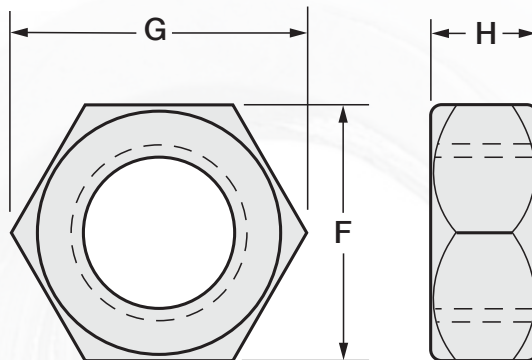


SPECIFICATIONS

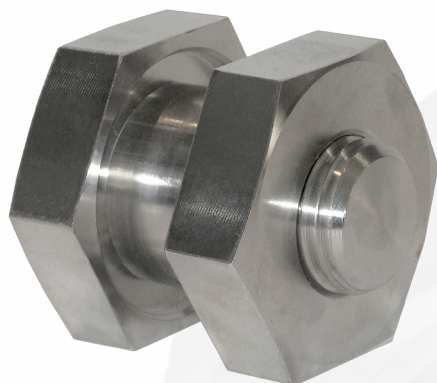
Grades: A563, A194, SAE J995

Threads: U.N.C./U.N.F., Class 2B, Right or Left Hand

Finish: Self-Colored, Galvanized, Plated



Thread Diameter (Inches)	Width Across Flats F	Width Across Points G	Thickness Heavy Hex H	Thickness Heavy Hex Jam H
1/2	7/8	9.69-1.010	.277-.317	.464-.504
5/8	1-1/16	1.175-1.227	.587-.631	.337-.381
3/4	1-1/4	1.382-1.443	.710-.758	.398-.446
7/8	1-7/16	1.589-1.660	.833-.885	.458-.510
1	1-5/8	1.796-1.876	.956-1.012	.519-.575
1-1/8	1-13/16	2.002-2.093	1.079-1.139	.579-.639
1-1/4	2	2.209-2.309	1.187-1.251	.687-.751
1-3/8	2-3/16	2.416-2.526	1.310-1.378	.747-.815
1-1/2	2-3/8	2.622-2.742	1.433-1.505	.808-.880
1-3/4	2-3/4	3.035-3.175	1.679-1.759	.929-1.009
2	3-1/8	3.449-3.608	1.925-2.013	1.050-1.138
2-1/4	3-1/2	3.862-4.041	2.155-2.251	1.155-1.251
2-1/2	3-7/8	4.275-4.474	2.401-2.505	1.401-1.505
2-3/4	4-1/4	4.688-4.907	2.647-2.759	1.522-1.634
3	4-5/8	5.102-5.340	2.893-3.013	1.643-1.763
3-1/4	5	5.515-5.774	3.124-3.252	1.748-1.876
3-1/2	5-3/8	5.928-6.207	3.373-3.506	1.870-2.006
3-3/4	5-3/4	6.341-6.640	3.616-3.760	1.990-2.134
4	6-1/8	6.755-7.073	3.862-4.014	2.112-2.264



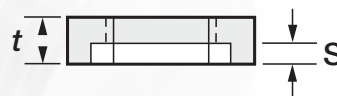
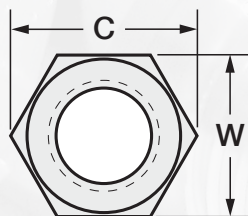
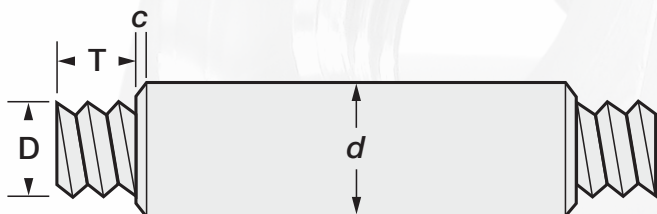
SPECIFICATIONS

Material: C-1035, SA-182-F-11, Stainless Steel

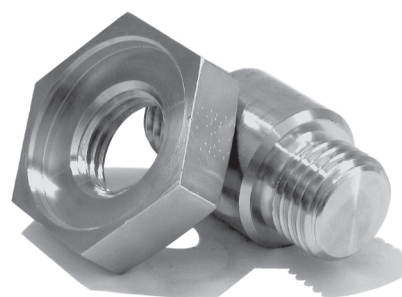
Threads: U.N.C./U.N.F. Class 2 B, Right or Left Hand, Metric

Finish: Self-Colored, Galvanized, Plated, Electro-Polished

Options: Heat Treating, Special Threading



Pin Diameter		Thread			NUT (Suggested Dimensions)							
					Recess				Diameter Rough Hole		Unit Weight (Lbs.)	
Sizes d		Diameter (In.) D	Length T	c	t	W	C	Rough Diameter	Depth s			
2	2 1/4	1 1/2	1	1/8	7/8	3	3 3/8	2 5/8	1/4	1 1/4	1	
	2 1/2	2 3/4	2	1 1/8	1	3 5/8	4 1/8	3 1/8	1/4	1 3/4	2	
3	3 1/4	3 1/2	2 1/2	1 1/4	1/8	1 1/8	4 3/8	5	3 7/8	3/8	2 1/4	3
	3 3/4	4	3	1 3/8	1/4	1 1/4	4 7/8	5 5/8	4 3/8	3/8	2 3/4	4
4 1/4	4 1/2	4 3/4	3 1/2	1 1/2	1/4	1 3/8	5 3/4	6 5/8	5 1/4	1/2	3 1/4	5
	5	5 1/2	4	1 5/8	1/4	1 1/2	6 1/4	7 1/4	5 3/4	1/2	3 3/4	6
5 1/2	5 3/4	6	4 1/2	1 3/4	1/4	1 5/8	7	8 1/8	6 1/2	5/8	4 1/4	8
	6 1/4	6 1/2	5	1 7/8	3/8	1 3/4	7 5/8	8 7/8	7	5/8	4 3/4	10
	6 3/4	7	5 1/2	2	3/8	1 7/8	8 1/8	9 3/8	7 1/2	3/4	5 1/4	12
	7 1/4	7 1/2	5 1/2	2	3/8	1 7/8	8 5/8	10	8	3/4	5 1/4	14
7 3/4	8	8 1/4	6	2 1/4	3/8	2 1/8	9 3/8	10 7/8	8 3/4	3/4	5 3/4	19
8 1/2	8 3/4	9	6	2 1/4	3/8	2 1/8	10 1/4	11 7/8	9 5/8	3/4	5 3/4	24
	9 1/4	9 1/2	6	2 3/8	3/8	2 1/4	11 1/4	13	10 5/8	3/4	5 3/4	32
	9 3/4	10	6	2 3/8	3/8	2 1/4	11 1/4	13	10 5/8	3/4	5 3/4	32





SINCE 1864

FORGED STEEL STRUCTURAL HARDWARE

800-431-4350

info@ccforge.com

www.ClevelandCityForge.com



ccforge



cc_forge

ORDERING & SHIPPING TERMS & CONDITIONS

Placing An Order

You can expedite your order by making sure all the information on your order form is complete and correct. Refer to our catalog to ensure your order has the correct stock numbers, dimensions and material. Special modified/custom items shall require an approval signature. Our policy is to ship the same day when possible or next day on stock items.

Variation Of Quantity

On special modified/custom orders Cleveland City Forge reserves the right to a quantity variation for allowances in manufacturing.

Terms

Established accounts: Net 30 Days. For your convenience Visa, Mastercard & American Express are accepted.

Freight

F.O.B. Wellington, Ohio - Customer must advise their preferred method of shipment. LTL shipments will be insured ONLY if specifically requested by customer. ALL UPS SHIPMENTS will be insured at current UPS rate unless customer specifies otherwise. ALL UPS SHIPMENTS will be charged a handling fee based upon total number of cartons shipped.

Handling Lost or Damaged Products

If a shipment is lost, notify our sales department as quickly as possible. We will assist in tracing the shipment and contact you regarding the disposition of the order. If you receive damaged products, notify the shipper immediately so that a claim may be filed by the responsible party. If you do not check product upon arrival, you will not have a valid claim against the shipper after 5 working days. For a shipment discrepancy, call Cleveland City Forge immediately. We cannot be responsible for claims after five (5) working days.

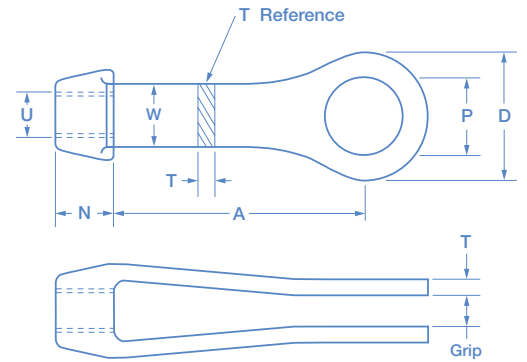
Return Policy

In the event that you need to return products, you must call first for authorization; otherwise, a credit cannot be issued. Return shipments must be prepaid. A restocking fee of 25% on the value of product or \$30.00 minimum (whichever is greater) will apply. Product cannot be accepted for return after thirty (30) days from shipment date.

SPECIAL MODIFIED/CUSTOM ORDERS CAN NOT BE RETURNED.

Warranty

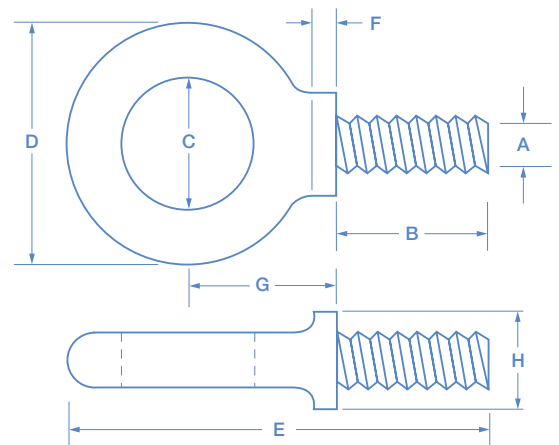
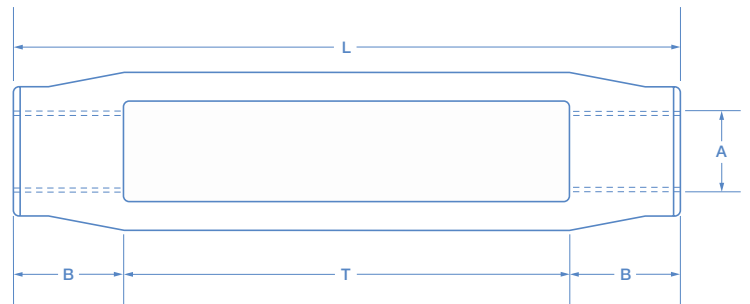
Cleveland City Forge warrants its products against defective materials and workmanship at time of shipment. Carrier assumes responsibility for damage in transit.



CLEVELAND CITY FORGE

SINCE 1864

FORGED STEEL STRUCTURAL HARDWARE





FORGED STEEL STRUCTURAL HARDWARE

www.ClevelandCityForge.com • 1.800.431.4350
46950 State Route 18 West, Wellington, Ohio 44090

